

REMARKS/ARGUMENTS

This Reply is submitted in response to the Office Action dated April 2, 2009 and follows the cancelation of an in-person interview by the Examiner due to the Examiner's unavailability for the scheduled interview.

Applicant's representative hereby renews the request for the interview which has been previously made. Applicant requests that, after consideration of this reply, if the Examiner intends to maintain the rejection the Examiner call Michael P. Straub (732-936-1400) to schedule the requested interview before issuing a new office action.

I. Introduction

Claims 1, 2, 5-17 and 26-44 are pending in the application. Claim 12 stands allowed. Claims 1, 2, 5-11, 13-17 and 26-44 stand rejected under 35 USC §103 based on the references applied in the office action.

As will be discussed below, all of the claims are definite and none of the pending claims are anticipated or rendered obvious by the applied references.

II. The Rejections under §103 Should Be Withdrawn

1. All The Rejected Claims Are Patentable Because the Independent Claims Are Patentable

Claims 1, 2, 5, 6, 8-11, 13-17 and 26-44 are indicated on page 2 to be rejected under 35 USC §103(a) as being unpatentable over the Black reference (US 2004/0100927) in-view of the Chang patent (US 6,895,010). However, where the rejection is discussed substantively, the Examiner refers to a Hwang reference not the Black reference. This seems to be an error.

Applicant assumes the current rejections are based on the Black reference not the Hwang reference. Applicant respectfully submits that claim 1 is patentable because it recites, among other things, the features indicated in bold below:

A communications method, the method comprising:
operating a first communications device to:

perform a decoding operation on a first signal including encoded signal information;

determine if the encoded signal information included in the first signal was successfully decoded;

when it is determined that said encoded information was successfully decoded, generating an ACK signal having an ACK signal value; and

when it is determined that said encoded information was not successfully decoded, generating a first NAK signal having one of a plurality of possible NAK signal values, *each NAK signal value, in the plurality of NAK signal values, differing from any other one of the NAK signal values in said plurality by an amount which is less than the smallest amount any one of said NAK signal values differs from said ACK signal value*, each of said plurality of possible NAK signal values corresponding to a different level of decoding success.

In rejecting claim 1 and the other claims, the Examiner has failed to establish that the applied references, alone or in combination disclose the features indicated in bold above.

The Examiner has not indicated what the value of an ACK signal is in the reference and where the reference shows

...each NAK signal value, in the plurality of NAK signal values, differing from any other one of the NAK signal values in said plurality by an amount which is less than the smallest amount any one of said NAK signal values differs from said ACK signal value.

In the office action the Examiner states:

4. Hwang does not explicitly teach the first NAK signal corresponding to one of a plurality of possible NAK signal values, each NAK signal value, in the plurality of NAK signal values, having a NAK signal phase differing from any other one of the plurality of possible NAK signal values, the NAK signal phase between any two of the plurality of possible NAK values having a first quantitative difference less than a second quantitative difference between the NAK signal phase of less than the smallest amount anyone of said plurality of possible NAK signal values and the ACK signal phase.

5. Chang teaches (fig. 4) the first NAK signal corresponding to one of a plurality of possible NAK signal values (col. 17, line 61 - col. 18, line 6, **Chang teaches each NAK has a value corresponding to the sequence number of the frame received in error**), each NAK signal value, in the plurality of NAK signal values, having a NAK signal phase differing from any other one of the plurality of possible NAK signal values (Each sequence number representing

the frame received in error is assigned to the NAK value is unique and unlike the other sequence numbers as each frame is different), the NAK signal phase between any two of the plurality of possible NAK values having a first quantitative difference less than a second quantitative difference between the NAK signal phase of less than the smallest amount anyone of said plurality of possible NAK signal values and the ACK signal phase (col. 19, lines 14-67, **Chang teaches a NAK time counter and each NAK value is reflected from that time. Therefore any phase (time difference) between any two NAKs will differ from a phase (time difference) between any other NAKs). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hwang to include Chang's NAK values to ensure that the proper data is retransmitted.**

The Examiner seems to consider frame numbers, e.g., sequential values used to identify a frame, in the CHANG reference to be NAK signal values. If the frame number is a NAK signal value when a frame is incorrectly received then it would seem that the Examiner is probably also considering a frame number corresponding to a properly received frame to be an ACK signal value. In such a case, the difference in the frame numbers corresponding to correctly received sequential frames could be the same as the difference between frame numbers corresponding to incorrectly received sequential frames.

The Examiner's equation of frame numbers to ACK and NAK signal values does not result in or suggest anything close to the feature recited in pending claim 1, indicated in bold above, or any of the other independent claims.

In view of the above remarks, it is respectfully submitted that the rejection of claim 1 and all the other pending claims should be withdrawn.

2. **Additional Reason Dependent Claim 4 is Patentable**

In the rejection of the claims the Examiner states:

...any phase (time difference) between any two NAKs will differ from a phase (time difference) between any other NAKs).
(Office Action page 3)

Applicants respectfully submit that signal **phase** and transmission time of a signal are **NOT** the same thing. It should be appreciated that signals may be

transmitted at the same point in time with different phase. Similarly transmitting signals at different times does not mean signals are inherently transmitted with different phases.

Accordingly, dependent claim 4 is patentable for the additional reason that it recites:

The method of claim 1, wherein said NAK and ACK signals are complex signals and wherein said NAK signal values and said ACK signal values are phase values.

In view of the above remarks, it is respectfully submitted that dependent claim 4 which is patentable for the same reasons as claim 1 from which it depends, is also patentable for the additional features it recites.

III. Request for Clarification

If the Examiner issues any new or future rejection it is respectfully requested that the Examiner identify precisely **at least one ACK signal value in the applied reference upon which the Examiner relies and at least two different NAK signal values upon which the Examiner relies to reject claim 1.** With clear identification of actual signal values in the reference which the Examiner considers to correspond to the ACK and NAK values recited in the independent claims, Applicant will be able to more fully respond to any new or repeated rejections.

Without such clear identification it is difficult to determine how NAK signal values differ from ACK signal values in the applied reference.

IV. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the pending claims are in condition for allowance¹. Accordingly, it is requested that the Examiner pass this application to issue.

None of the statements or discussion made herein are intended to be an admission that any of the applied references are prior art to the present application and Applicants preserve the right to establish that one or more of the applied references are not prior art.

Respectfully submitted,

Dated: July 2, 2009

By: 

Donald C. Kordich, Reg. No. 38,213
(858) 658-5928

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5787
Facsimile: (858) 658-2502